Bats of Seething Wells

Kingston benefits from being encapsulated by L.B. Richmond and the river Thames. Kingston is 12% open space, whilst Richmond is 55%. The nature reserves in Kingston tend to be small linear parks along the rivers Hogsmill, Bonesgate and Tolworth brook. Woodland canopy cover is rare habitat in Kingston and tends to be restricted to Chessington and Kingston Vale. It is woodland that forms the primary habitat for many bat species all of which will usually spend some of their nights foraging near water. Bats require large areas of quality habitat, with strong linear features used for navigation and that are unaffected by light pollution. There are 17 bat species in the UK. Of these 10 are regularly recorded in the London Region, all of which are recorded in Richmond Borough (although two of these are only rarely found). Of the eight species recorded in Kingston: four are recorded regularly (emboldened in the table below) one occasionally; and 3 rarely. All have been recorded at Seething Wells Filter Beds and the adjacent river (Batty Boat Trips 2006-11). No other site in the borough can claim such bat interest although Canbury Gardens remains a close second for sheer numbers and abundance of bat species.

Table 1: Species and Status of bats recorded in Kingston upon Thames. Adapted from Mitchell-Jones (2007)

Species	Frequency and most probable roost site
Common pipistrelle	Common: Mainly uses buildings as roost sites. Roosting at Seething Wells. The commonest pipistrelle species recorded foraging at Seething Wells. Roosts at Kingston Hill (several small roosts known).
Soprano pipistrelle	Common: Can use **trees** and buildings for roosting. A very large roost known in Surbiton. Smaller roosts are also recorded in Surbiton and on Kingston Hill near Richmond Park.
Nathusius's pipistrelle	Has been a speciality of Kingston in former years. Recorded along the river especially the entrance to Canbury Gardens, Railway bridge and at Seething Wells since 2001 and usually during the June Batty Boat trip, but not recorded this year for the first time.
Long–eared bat	Common in wooded counties but there are a few strongholds in some larger parks where there are historic building. Very rarely recorded in Kingston and not recently recorded at Seething Wells.
Serotine	Local and very rarely recorded in Kingston in recent years, roosts in buildings. Not recorded at Seething Wells since 2006.
Noctule bat	Uncommon (TMJ) (Briggs *et al*, 2008) .Roosting nearby but no roosts known in the borough. Forages over the Filter Beds, amazing displays over Seething Wells during this years Batty Boat Trip
Leisler's bat	Rare nationally. Roosting nearby and forage over the Filter Beds
Natterer's bat	Common in wooded counties rare in Kingston. Recorded at the Fishponds, Chessington and Seething Wells but not for several years
Daubenton's bat	May be declining in the London region (Briggs et al, 2007) Roost on site at several locations. This bat also uses trees in Bushy Park, buildings or structures over water. Like most bats can use structures (or trees) as **transient**, mating, hibernation or summer roosts.

Bats most commonly recorded

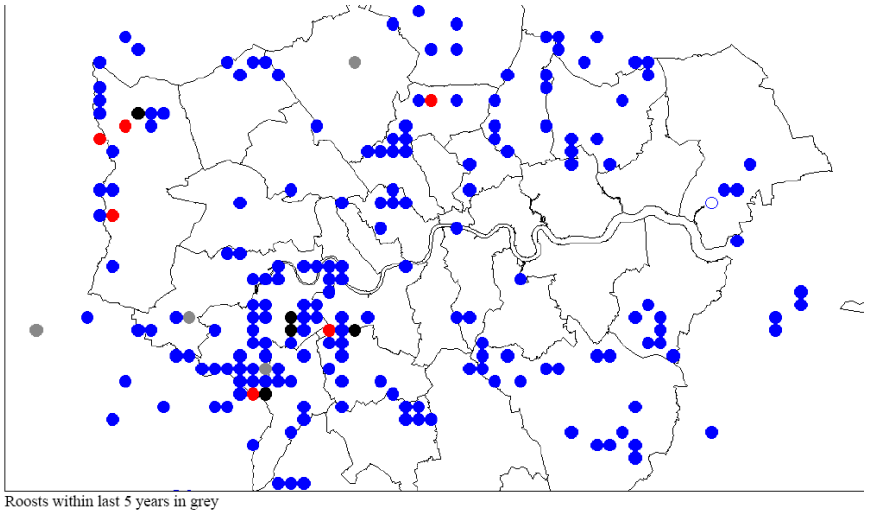
PIPISTRELLE SPECIES:

Three pipistrelle species (common, soprano and Nathusius) have been recorded during surveys in and around Seething Wells. The "common" pipistrelle has been split into two separate species *Pipistrellus pipistrellus* that echolocates around 45 kHz and *P. pygmaeus* that calls around 55 kHz. The 45 kHz pipistrelle can use a wide range of habitats, but frequents the more open situations, such as woodland edges, parkland, recent plantations, watersides and gardens. Colonies, usually of 30-60 bats; they frequently use buildings for roost sites and have roosted in the small pumping station. The 55 kHz pipistrelle may prefer waterside locations such as rivers, lakes and wet woodland. Colonies are usually larger than the 45 kHz pipistrelle with numbers often in the region of 100-150. Roosts in houses are frequent but tree roosts are also found. Nathusius pipistrelle was first recorded along Barge Walk during 2001 (whilst watching Daubenton's bats emerge from the Filter Beds site). Since then, this species has been regularly recorded during annual Batty Boat Trips and the 'Daubenton's Waterway surveys' until this year, when it failed to make its regular appearance. As a specialist of open water habitats it does not remain as close to vegetation as the other pipistrelle species and is often found at reservoir sites around London. For this reason we have been recording Nathusius around Seething Wells during the last ten years.

NYCTALUS BATS: Leisler's and Noctules

Noctule bats are one of Britain's largest species, they are adapted to fast flying above the treetops and can cover large distances from roost to feeding areas, 10km or more being frequent. Noctules normally feed on larger beetles and moths but will take much smaller prey such as chironomids when these occur in large swarms. Noctule roosts are almost invariably in hollow trees, woodpecker holes being a favourite site and the last 5 years they have roosted very close to Seething Wells. They are becoming increasingly rare and there are pockets in London which remain a stronghold for them. A car survey undertaken by the Hertfordshire & Middlesex Bat

Group found only 9 noctules after driving 600 miles (2005). The status of Leisler's bats is under re-evaluation due to recording analysis highlighting their regular confusion with noctule bats. Observations at London sites suggest replacement by the closely related Leisler's bat at some former strongholds. The appearance of Leisler's over the Filter Beds varies from year to year and sometimes it is only recorded briefly.



Roosts within last 5 years in grey
© London Bat Group October 2011

DAUBENTON'S BAT.

Knowledge of a roost location is usually kept 'secret'. However, the Daubenton's maternity colony at Seething Wells has become widely known and why not, it is something we should celebrate. What hasn't been publicised is the rarity of Daubenton's colonies in London. The above distribution map indicates known Daubenton's roosts within the London Region, recorded within the last 5 years. These are marked by the grey dots of which there are only 4.The black dots are the numbers of Daubenton's roosts known in the last ten years swelling the total to nine. The red dots indicate all the roosts we have ever known since we began recording. The blue dots equate to all flying records over the open water habitats, where this bat is found. Daubenton's bats require very specific habitat and are closely associated with water. This species is known for its habit of foraging close to the surface of ponds and rivers. It's favoured feeding method to pick prey off a smooth water surface and so avoids fast flowing streams. Water dominated by surface vegetation or sites exposed to wind disturbance are generally avoided and it is during bad weather that the Filter Beds have been particularly important for our resident colony. At different times of the year Daubenton's bats seek different parts of the waterworks site. As they do not wish to wake from thier 'torpor' during winter cold snaps, they move to colder parts of the site. Waking during cold periods depletes their energy store and there is no insect prey when temperatures fall below 6 degrees or so. This species requires a range of opportunities within an area in order to remain at Favourable Conservation Status. Light pollution is an issue for this bat, which emerges later in the evening than most other bat species recorded. European Law protects the not only the bat and its roost but also the habitat of a maternity colony. It could be argued that draining of the Filter Beds was not in accordance with the spirit of the Habitats Regulations.